ELSEVIER

Ecological Modelling 96 (1997) 315–316

ECOLOGICAL MODELLING

Contents of *Ecological Modelling*, Vol. 96

VOL. 96 NO. 1 1 MARCH 1997

Ecological impact classification with fuzzy sets
W. Silvert (Dartmouth, NS, Canada) 1
Artificial neural network approach for modelling and prediction of algal blooms
F. Recknagel (Adelaide, Australia), M. French (Louisville, KY, USA), P. Harkonen (Espoo, Finland) and K.-I. Yabunaka (Tokyo, Japan) 11
A model describing the population dynamics of *Sitobion avenae* and *Coccinella septempunctata*
D.J. Skirvin, J.N. Perry and R. Harrington (Hertfordshire, UK) 29
Zooplankton field heterogeneity formation on the mesoscale: elements of the theory and empirical characteristics
G.A. Goldberg, S.A. Piontkovski (Sevastopol, Ukraine) and R. Williams (Plymouth, UK) 41
Modelling the hydrogen sulphide zone of the Black Sea
V.I. Belyaev, E.E. Sovga and S.P. Lyubartseva (Sevastopol, Ukraine) 51
Recolonization of cleared patches by macrophytes: Modelling with point processes and random mosaics
E. Chiarello and M.-H. Barrat-Segretain (Villeurbanne, France) 61
Describing states and dynamics in far from equilibrium systems. Needed a metric within a system state space
S. Ulgiati and C. Bianciardi (Siena, Italy) 75
Prediction of water quality in lakes and reservoirs. Part I – Model description
D.P. Hamilton and S.G. Schladow (Nedlands, Australia) 91
Prediction of water quality in lakes and reservoirs: Part II – Model calibration, sensitivity analysis and application
S.G. Schladow and D.P. Hamilton (Nedlands, Australia) 111
Clonal plant species in a dry-grassland community: A simulation study of long-term population dynamics
E. Winkler (Leipzig, Germany) and S. Klotz (Bad Lauchstädt, Germany) 125
Emergent value orientation in self-organization of an animat
F. Krebs and H. Bossel (Kassel, Germany) 143
A stoichiometric model for water quality interactions in macrophyte dominated water bodies
S.S. Park (Seoul, South Korea) and C.G. Uchrin (New Brunswick, NJ, USA) 165
Carbon and nitrogen fluxes in decomposing leaf litter with microbial–detritivore interactions: model simulations compared to microcosm ecotoxicity tests
J. Van Wensem, N.M. Van Straalen and S.A.L.M. Kooijman (Amsterdam, The Netherlands) 175
Testing the 'CENTURY' ecosystem level model on data sets from eight grassland sites in the former USSR representing a wide climatic/soil gradient
T.G. Gilmanov (Moscow, Russia), W.J. Parton and D.S. Ojima (Fort Collins, CO, USA) 191
Succession in a three-species food-chain model
D. Kesh, A.K. Sarkar and A.B. Roy (Calcutta, India) 211
Ecosystems emerging: 1. conservation
B.C. Patten (Athens, GA, USA), M. Straškraba (Česke Budějovice, Czech Republic) and S.E. Jørgensen (Copenhagen, Denmark) 221
A physiological basis for estimating inorganic carbon release during photosynthesis by natural phytoplankton
Y. Collos (Montpellier, France) 285

Predicting dynamics of spatial automata models using Hamiltonian equations
W.M. Childress (Fort Collins, CO, USA) 293

Letters to the Editor
Spatial and temporal ordering of events in discrete time cellular automata – An overview
G.C. Smith and D.S. Bull (York, UK) 305
Exergy of the Biosphere
Yu. Svirezhev (Potsdam, Germany) 309

Author Index 311

Subject Index 313

Contents of *Ecological Modelling*, Vol. 96 315